

Early Fractions Learning of 3rd Grade Students in SD Laboratorium Unesa

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Abstract

Fractions varied meanings is one of the causes of difficulties in learning fractions. These students should be given greater opportunities to explore the meaning of fractions before they learn the relationship between fractions and operations on fractions. Although students can shading area represents a fraction, does not mean they really understand the meaning of fractions as a whole. With a realistic approach to mathematics, students are given the contextual issues of equitable distribution and measurements that involve fractions.

Keyword: fraction meaning, relation of fraction, *design research*, realistic mathematics education, equitable distribution, measurement

Abstrak

Makna pecahan yang bervariasi merupakan salah satu dari penyebab-penyebab kesulitan dalam pembelajaran pecahan. Siswa-siswa seharusnya diberi kesempatan seluas-luasnya untuk mengeksplorasi makna pecahan sebelum mereka mempelajari hubungan antar pecahan dan operasi pada pecahan. Walaupun siswa dapat mengarsir daerah yang merepresentasikan suatu pecahan, tidak berarti mereka benar-benar memahami makna pecahan secara menyeluruh. Dengan pendekatan matematika realistik, siswa diberi permasalahan kontekstual tentang pembagian adil dan pengukuran yang melibatkan pecahan.

Kata kunci: makna pecahan, hubungan antar pecahan, *design research*, pendidikan matematika realistik, pembagian adil, pengukuran

There have been a huge number of researches on fractions conducted for the reason of difficulties on learning and teaching fractions (Hasseman, 1981; Streefland, 1991). Children tended to be proficient in doing algorithm rather than in reasoning performance. As the consequence, students often do some mistakes that show their lack of understanding of meaning of fractions such as $\frac{1}{2} + \frac{2}{3} = \frac{3}{5}$. As experienced in teaching, developing the understanding of meaning of fractions is a complexity because fractions have many interpretations (Lamon, 2001 in Anderson & Wong, 2007) shown on the following table,